REMARKS

This Amendment is in response to the Office Action of June 21, 2002, in which claims 1-8 and 11-57 were rejected. Reconsideration and allowance of claims 1-8 and 11-57 are requested. Claims 45, 46, and 52 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 45, the Examiner states that it is unclear how air is moved through the outlet port when it is for releasing fluids and is not connected to the lungs. Claim 45 is amended to clarify that a volume of air produced by the tidal breathing of the patient moves air from the outlet port into the lungs of the patient. The Examiner is also directed to page 10, line 17-19 of the application for further explanation.

Claim 46 was rejected, because the phrase "positioned in relation to" does not set forth any metes or bounds. In addition, the Examiner was not clear as to where the "humidified air" originated. Claim 46 is amended to clarify the position of the outlet port and that the humidified air originates from the patient.

The Examiner rejected claim 52, because it is not clear how a "configuration" caused humidified air to travel and where the source of the humidified air is. Claim 52 is amended to clarify the function of the configuration of the mouthpiece chamber and the source of the humidified air.

Claim 33 is amended for clarification.

In general, the specification teaches various methods of chest wall oscillation that describe an oscillating compressive force applied to the chest and an air pressure supplied to the patient's lungs through a mouthpiece. The oscillating compressive force may have a steady state force component and an oscillating force component. The air pressure may have a steady state air pressure component and an oscillating air pressure component.

The specification describes various methods that include: a method such that the air pressure opposes the oscillating compressive force, a method such that the air pressure and oscillating compressive force are coordinated to induce mucus movement; and a method that in effect accomplishes a shift in effective atmospheric pressure.

Claims 1, 3-5, 7, 8, 11-16, 56, and 57 were rejected under 35 U.S.C. § 102(b) as being anticipated by Alferness. Alferness does not teach having air pressure having an oscillating air pressure component and a steady state air pressure component supplied to the mouthpiece. The Examiner states that "Alferness shows a method comprising: applying an oscillating compressive force which includes a steady state component (30, column 4, lines 55-57) and an oscillatory component (10, column 4, lines 34-39), and supplying air pressure to a mouthpiece having a mouthpiece chamber (24), an outlet port (26), and an air supply port (22), the pressure having an oscillating component (column 4, lines 34-42) and a steady state component (column 4, lines 63-67) and a "net flow", the pressures inherently "counteracting" since they originate from the same source, both pressures being "effective"." (Paper No. 7, paragraph 3). The Examiner further states the "same pressure applied to bellows naturally supplies air to the mouth piece." (Paper No. 12, paragraph 6). Alferness discloses having valve 26 coupled to the bladder. "[V]alve apparatus 26 functions to pressurize, and thereby inflate, bladder 30 during a compression of bellows 10. Bladder 30 remains inflated during successive compressions of bellows 10. . ." (Column 4, lines 52-57). "When CPR has been competed, or at any other time, valve apparatus 26 may be manually actuated by the user to vent bladder 30. . ." (Column 5, lines 8-12). Since the valve essentially closes off the bladder, there is no steady state air pressure component from the bladder to the air supply entering the mouth. With the amendment to claim 5, independent claims 1, 5, 14, 16, 56, and 57 each state having an air supply to the mouth that has a steady state air pressure component and an oscillating air pressure component. Since Alferness does not disclose Applicant's invention, the rejection of these claims should be withdrawn.

The purpose of the apparatus taught in Alferness is to more efficiently pump blood during CPR. The purpose of the method stated in claims 11 and 15 is to induce mucus movement in the lungs of a patient. Since the overall purpose of the apparatus of Alferness is different than the purpose claimed in claims 11 and 15. Claims 11 and 15 are not disclosed by Alferness. The Examiner's rejection of these claims should be withdrawn.

Claims 2, 6, and 17-55 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Alferness. In view of the amendment to claim 5 and the above-discussion regarding independent

claims 1, 5, and 16 upon which claims 2, 6, and 17-55 depend, the rejection should be withdrawn. Alferness does not teach or suggest claims 2, 6, and 17-55.

CONCLUSION

In conclusion, Applicant believes this Amendment has placed the application in condition for allowance. Notice to that effect is respectfully requested. The Commissioner is authorized to charge any additional fees associated with this paper or credit any overpayment to Deposit Account No. 11-0982. A duplicate copy of this communication is enclosed.

Respectfully submitted,

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Date: 9/23/02

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APPENDIX:
MARKED UP VERSION OF SPECIFICATION AND CLAIM AMENDMENTS

5.(Thrice Amended) A chest wall oscillation method, comprising:

applying an oscillating compressive force to a chest of a patient, the oscillating compressive force having a steady state force component and an oscillating force component; and

supplying air pressure to a mouthpiece in communication with a mouth of the patient to provide a steady state air pressure component which at least partially cancels the steady state force component and provide an oscillating air pressure component.

11.(Twice Amended) A chest wall oscillation method for removal of mucus from a lung of a patient, the method comprising:

applying an oscillating compressive force to a chest of a patient; and

supplying air pressure to a mouthpiece with a steady state air pressure component in a direction and a magnitude which tends to counteract a steady state force component of the oscillating compressive force.

33.(Amended) The method of claim 28 wherein the oscillating air pressure component produces a simulated cough [is produced].

45.(Amended) The method of claim 42 wherein a volume of air produced by tidal breathing of the patient moves air from [through] the outlet port into lungs of the patient.

46.(Amended) The method of claim 41 wherein the outlet port is positioned at a distance from the mouthport so that humidified air which flows from the patient during outflow half cycles is returned to the patient during inflow half cycles [humidified air travel from the mouthport in a cycle].

52.(Amended) The method of claim 51 wherein the mouthpiece chamber has a configuration which

APPENDIX:
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causes humidified air [travel from the mouthport in] from the patient to be contained substantially within the chamber [in] during a cycle of the oscillating air pressure component [to be contained substantially within the chamber].